Research & Development Program 3.1

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FY 1992

Research- Based Personnel and Training Study and Analysis Program SELECTE JAN1 5 1993



United States

Army

Research Institute

Approved for public release.

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Research-Based Personnel and Training Study and Analysis Program

Objective

Provide recommendations from studies and analyses using behavioral and social sciences data and information to support personnel and training decisions, policies and doctrine.

Potential Payoff

Better informed personnel and training decision/policy/doctrine makers means better decisions and policies

Introduction

The ARI Research-Based Personnel and Training Study and Analysis program is new for Fiscal Year 1992. Behavioral and social science expertise, knowledge and databases will be used to conduct short-term studies and analyses that will directly aid decision/policy/doctrine makers in making more informed, more timely decisions affecting the Army's most costly resource, personnel. This program has the following characteristics.

- o Provides answers to critical issues using available knowledge and/or tools of the behavioral and social sciences
- O Uses existing data (e.g., from the National Training Center) or generate new data (e.g., survey)
- o Short Term (0-2 years)
- o Planned and prioritized for the Budget Fiscal Year (BFY)
- o Responsive to changing requirements
- o Risk: Low

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Policy

- * Each study or analysis request must be signed by a general officer or member of the Senior Executive Service.
- * Each study or analysis in the approved program will be documented by a Memorandum for Record (MFR) detailing ARI's approach and the sponsoring agency's resource commitment and intended utilization of the study or analytic product.
- * Requests for studies and analyses approved by the DCSPER will be funded by appropriated funding in order of priority. This will represent the "core" program.
- * Requests falling outside the "core" program approved by the DCSPER will be met if in-house ARI and/or contract personnel with required expertise are available and the requester provides the necessary funding.
- * The DCSPER/ADCSPER will approve all major changes to the approved program.

Procedures

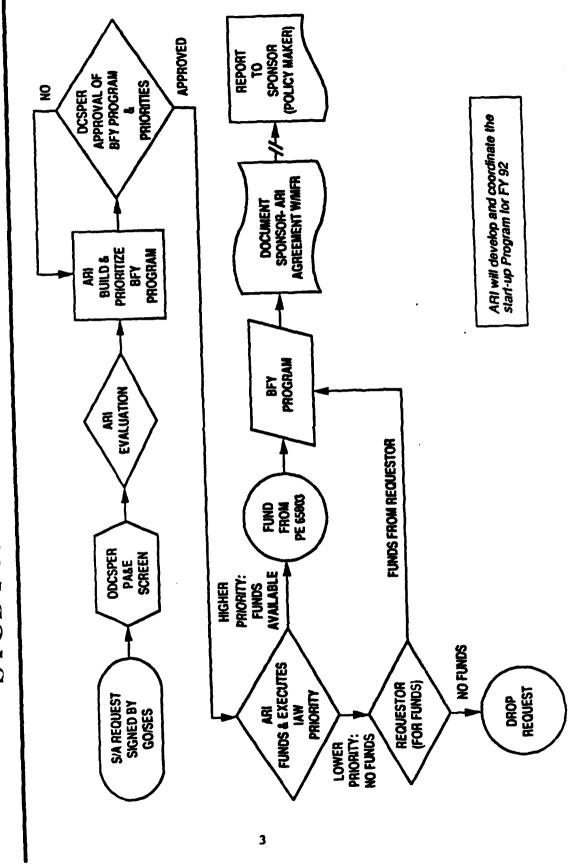
ARI developed and submitted the first year's baseline program (FY92) for approval by the DCSPER. The procedure to be followed in developing the program for subsequent years is described below and shown schematically in Figure 1.

The program for the budget fiscal year (BFY) and the target fiscal year (TFY) will be developed annually. Each February/March a memorandum will be distributed to the ARSTAF, MACOMS, and to OSD describing the program and procedures for requesting a study or analysis.

Requests will be submitted to ODCSPER PA&E by a general officer or a member of the Senior Executive Service. The PA&E Office will screen requests for suitability and those requests deemed appropriate for the program will be forwarded to ARI for evaluation.

ARI will accept or reject requested study or analysis based on availability of qualified behavioral and social science personnel. For each accepted request, ARI will submit a one page Study & Analysis Plan that outlines the approach and provides an estimate of personnel and other resources required.

RESEARCH-BASED PERSONNEL AND TRAINING STUDY AND ANALYSIS PROGRAM



The ARI Commander and Technical Director will annually approve inclusion of individual study or analysis efforts in the proposed BFY program and draft a prioritized program. The SORD-PT GOSC will review the draft program and recommend disposition to the DCSPER. The DCSPER will approve the final program.

Requests falling outside the "core" program will be met if personnel with required expertise are available and the requester provides required funding. PP&O will provide information to each requester through the ODCSPER PA&E on the status of the request and any funding requirement.

Proposed studies and analyses which cannot be performed because of lack of qualified in-house or contract personnel or unavailability of funds will be dropped from the final BFY program.

An MFR will be signed by ARI and the sponsoring agency for each approved study or analysis.

Unprogrammed, out-of-cycle studies or analyses may be requested during the CFY. However, such requests can only be met if: a) the request is approved by the DCSPER/ADCSPER, b) in-house or contract personnel with the required expertise are available, and, c) the DCSPER prioritizes the study above the funding line or the requester provides necessary funding.

Proposed FY92 Program

Table 1 shows the initially approved program for Research-Based Personnel and Training Study and Analysis for FY92. The seven tasks that comprise the program, their associated work units, funding, and initial work unit priorities that have been approved by the DCSPER are also included. Subsequent pages describe each task and work unit in detail.

TABLE 1. ARI FY92/93 STUDY AND ANALYSIS WORK UNITS

FY93 210 710 488 9 11 777 114 (000\$) FY92 928 499 150 268 279 165 191 93 93 321 11 Transitioning of Soldiers to Civilian Life (2107C01) Impact of Economic and Demographic Variables on Marketing and Advertising Strategies (2107H01) Improved Classification with Existing Tests (2215H01) 1991 Survey of High School Youth (2107C02) Costs of Alternative Force Mixes (2106C01) Task: 2215 JOB-SPECIFIC SELECTION AND CLASSIFICATION Army College Fund Database (2106C02) Survey of Civilian Nurses (2106C03) 2107 MARKETING AND ADVERTISING Enlistment (2106H01) 2106 MANPOWER PLANNING Nork Unit: Work Unit: Work Unit: Work Unit: Work Unit: Work Unit: Work Unit: Nork Unit: Task: Task: Rank-Order 15 9 S

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TASK 2106: MANPOWER PLANNING

OBJECTIVE:

To determine the impact of economic/demographic variables on enlistment, reenlistment, attrition, and separation; forecast future enlistments; determine efficient allocation of recruiting resources;

determine costs of alternative enlisted force mixes.

FUNDING:

FY92:

\$928K

FY93:

\$710K

Work Unit:

Impact of Economic and Demographic Variables on Enlistment

(2106H01)

issue:

How to recruit sufficient numbers of high quality soldiers at

least cost.

Sponsor:

ODCSPER (DMPM)

Start Date:

1st Quarter FY92

End Date: 4th Quarter FY93

Est. Cost:

\$987K

FY92:

\$499K

FY93:

\$488K

Description:

To determine impact of economic/demographic variables

on enlistment, and forecast future enlistments and

race/ethnic composition of the force. Determine efficient allocation of resources to maintain accession quality.

Impact:

Assist in determination and defense of the recruiting

budget, defense of the race and ethnic composition of the force, and defend the All Volunteer Force against the draft.

Work Unit:

Costs of Alternative Force Mixes (2106C01)

issue:

How to efficiently downsize the active enlisted force.

Sponsor:

ODCSPER (DMPM): BG Stroup

Start Date:

2nd Quarter FY92

End Date:

4th Quarter FY93

Est. Cost:

\$360K

FY92:

\$150K

FY93:

\$210

Description:

To build an operational active Enlisted Personnel Inventory.

Cost, and Compensation (EPICC) model to "grow" and cost

alternative forces of varying characteristics.

Impact:

Will provide the Army with least-cost alternatives for active

enlisted force manning.

Work Unit:

Army College Fund Database (2106C02)

Issue:

Army College Fund usage and cost-effectiveness.

Sponsor:

ODCSPER (DMPM)

Start Date:

3rd Quarter FY92

End Date: 2nd Quarter FY93

Est. Cost:

\$22K

FY92:

\$11K

FY93:

\$11K

Description:

To build and update a database on Army College Fund

usage combining VA, Army, and actuarial records.

Impact:

Assist in determination and defense of recruiting budget; monitor ACF program costs assessed by DOD actuary; estimate usage and costs of any enhancements to existing ACF program. Provide the Army with least-cost incentives

for recruiting nurses.

Work Unit:

Survey of Civilian Nurses (2106C03)

Issue:

The Army has not achieved its nurse recruiting objectives.

The shortfall is extremely serious for both the active and

reserve components.

Sponsor:

USAREC: MG Wheeler

Start Date:

1st Quarter FY92

End Date: 4th Quarter FY92

Est. Cost:

\$268K

Description:

To administer a survey to employed civilian nurses, nursing students and nurse who applied to the Army but declined a

commission.

Impact:

Provide the Army with least-cost incentives for recruiting

nurses.

TASK 2107: MARKETING AND ADVERTISING

OBJECTIVE:

FUNDING:

Resolution of active and reserve recruit marketing issues for the sustainment of a quality force. Immediate issues include labor market competition and negative influences from the Gulf War.

\$647K

Work Unit: Marketing and Recruiting Strategies (2107H01)

Issue: How to best reach the recruiting market to enlist sufficient

numbers of high quality soldiers (Active and Reserve).

FY93:

\$114K

Sponsor: ODCSPER (DMPM)

FY92:

Start Date: 1st Quarter FY92 End Date: 4th Quarter FY92

Est. Cost: \$165K

Description: Recruitment of women and minorities are currently

important issues as are parental influences and the recruitment of reserves and medical personnel.

Impact: More effective marketing strategies and incentive and

advertising programs.

Work Unit: Transitioning of Soldiers to Civilian Life (2107C01)

Issue: Determine how to best transition soldiers to civilian i....

Sponsor: USAREC: MG Wheeler

Start Date: 1st Quarter FY92 End Date: 4th Quarter FY93

Est. Cost: \$435K **FY92:** \$321 **FY93:** \$114K

Description: The Army is facing the first transition of large numbers of

RIFFed soldiers and combat veterans of an all recruited

Army. Monitoring this transition is vital for future

recruitment efforts.

Impact: More effective transitioning programs resulting in more

"good will" for the Army and increased propensity for

enlistment.

Work Unit: 1991 Survey of High School Youth (2107C02)

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Issue: Determine the impact of Operation Desert Storm on youth

enlistment intentions.

Sponsor: ODCSPER (DMPM)

Start Date: 1st Quarter FY92 End Date: 4th Quarter FY92

Est. Cost: \$161K

Description: The enlistment intentions of youth for service in the Regular

Army and the Army Reserve may have changed as a result of Operation Desert Storm. Collection of these data will permit assessment of change in intentions by component, as well as analysis of the cost effectiveness of various

incentives.

Impact: More effective marketing strategies, enlistment incentives

and advertising strategies.

TASK 2215: SELECTED SELECTION AND **CLASSIFICATION ISSUES**

OBJECTIVE:

To conduct studies which will provide recommendations leading to

improvement of current procedures for enlisted selection and

classification.

FUNDING:

FY92:

\$93K

FY93:

\$0K

Work Unit:

Improved Classification with Existing Tests (2215H01)

Issue:

Should there be a change in the current Mechanical Maintenance ASVAB Aptitude Area composite used to determine eligibility of soldiers for that job grouping?

Sponsor:

ODCSPER (DMPM)

Start Date:

1st Quarter FY92

End Date: 2nd Quarter FY92

Est. Cost:

\$93K

Description:

One of the ASVAB Aptitude Area composites used in soldier classification is known as the Mechanical Maintenance (MM) composite. This effort will conduct analyses to determine if proposed changes to the Mechanical Maintenance composite will result in a better

matching of soldiers to jobs.

Impact:

Improved classification of thousands of soldiers annually in

critical maintenance MOS, with substantial performance

benefits to the Army.

TASK 2216: IMPLEMENTATION OF NEW PREDICTOR TESTS

OBJECTIVE:

To resolve issues concerning the appropriate use of new

temperament, psychomotor and spatial tests in the existing

enlisted selection and classification system.

FUNDING:

FY92:

\$124K

FY93:

\$108K

Work Unit:

Recommendations for Improved Testing (2216H01)

issue:

What new predictor tests will provide the greatest benefit to

the Army if added to the current selection and classification

system?

Sponsor:

ODCSPER (DMPM)

Start Date:

1st Quarter FY92

End Date:

2nd Quarter FY93

Est. Cost:

\$88K

FY92:

\$54K

FY93:

\$34K

Description:

The central component of the current selection and classification system is the Armed Services Vocational Aptitude Battery (ASVAB). By late 1992, recommendations for new tests to be included in the ASVAB, if any, will be needed. The Army has conducted extensive analyses

showing the validity of its tests for selection and

classification purposes. The objective of this work unit is to

conduct additional analyses and to formulate

recommendations for ASVAB changes.

Impact:

Will be instrumental in ensuring that the new selection and

classification system provides optimal performance benefits

to the Army.

Work Unit:

Fairness Analyses (2216C01)

issue:

What impact will the new predictor tests have on different

racial and gender subgroups?

Sponsor:

ODCSPER (DMPM)

Start Date:

1st Quarter FY92

End Date:

4th Quarter FY93

Est. Cost:

\$144K

FY92:

\$70K

FY93:

\$74

Description:

The performance of selected racial and gender subgroups on composites formed from currently operational tests and new tests proposed for operational use will be determined. Subgroup scores on performance measures will also be computed as a basis for comparison. Analyses will be conducted to address the question: how fair are the new

tests to each subgroup examined?

Impact:

Will ensure that issues of test fairness have been thoroughly

evaluated before recommendations regarding

implementation of new selection and classification test

composites are generated.

TASK 2217: REENLISTMENT AND PROMOTION ISSUES

OBJECTIVE:

To address issues associated with the improvement of

reenlistment and promotion procedures.

FUNDING:

FY92:

\$214K

FY93:

\$136K

Work Unit:

Retaining High Performing Soldiers while Building Down

(2217C01)

issue:

What personnel policies will ensure that high quality soldiers

are retained during the projected "build down" of Army

forces?

Sponsor:

ODCSPER (DMPM)

Start Date:

1st Quarter FY92

End Date:

3rd Quarter FY93

Est. Cost:

\$350K

FY92:

\$214K

FY93:

\$136

Description:

Selection, classification, reenlistment and promotion policies must be managed to insure that the Army does not lose its high quality soldiers during the projected build down. This effort will determine which current measures of first tour performance best predict second tour performance. Results will guide recommendations for use of these

measures in making reenlistment and promotion decisions.

Impact:

Will help ensure that the performance of the junior NCO

corps is maintained at a high level during the build down

process.

TASK 3408: LEADERSHIP DEVELOPMENT

OBJECTIVE:

To provide information for decisions about leader development

programs for current and future leadership requirements.

FUNDING:

FY92:

\$379K

FY93:

\$OK

Work Unit:

Leader Development Requirements Identified in Desert

Storm (3408HO1)

issue:

What do experiences in Operation Desert Storm

indicate about the leadership factors important to leader

and unit combat effectiveness?

Sponsor:

TRADOC (CGSC)

Start Date:

1st Quarter FY92

End Date: 4th Quarter FY92

Est. Cost:

\$204K

Description:

Assemble questionnaire data from surveys conducted by various Army agencies about Operation Desert Storm. Augment with interviews of unit leaders deployed to Saudi Arabia. Analyze data to identify the leadership factors important to leader and unit effectiveness. Specify

leadership requirements to emphasize in developing leaders

for effective combat performance.

Impact:

Improved specification and validation of combat critical

leadership development requirements.

Work Unit: Effectiveness of Leadership Development Practices (3408H02)

Issue: How effective are current leadership assessment and

development programs?

Sponsor: TRADOC (CGSC)

Start Date: 1st Quarter FY92 End Date: 3rd Quarter FY92

Est. Cost: \$175K

Description: Collect data on implementation of leadership development

programs by review of current practices, analysis of trainees' performance records, and interviews of program participants (trainers and trainees). Evaluate program consistency and adherence to doctrinal guidelines and

established principles for leader development.

Impact: Empirical basis for improving and defending leadership

development programs.

TASK 3414: ANALYSES OF COMBAT TRAINING **CENTER (CTC) PERFORMANCE**

OBJECTIVE:

To provide answers to critical issues for the Combined Arms

Training Strategy (CATS) and unit readiness assessment.

FUNDING:

FY92:

\$986K

FY93:

\$685K

Work Unit:

Recommendations for Improving CSS Data Collection (3414H01)

Issue:

What is the capability of the Logistics System to support

combat forces in meeting operational needs?

Sponsor:

TRADOC (CAC-T)

Start Date:

1st Quarter FY92

End Date: 4th Quarter FY92

Est. Cost:

\$148K

Description:

The CTCs provide the opportunity to fully execute CSS activities in a realistic environment which is not available during home station training. Consequently, they can provide information not available elsewhere. Data currently being collected will be compared to information needs of the CSS community to identify adequacy of current data and recommendations for improvement will be made.

Impact:

Assist the Combined Arms Logistics Center in improving

CSS doctrine and training using CTC data.

Work Unit:

Profiles of Unit Performance Strengths and Weaknesses in the

Maneuver Battlefield Operating System (BOS) Across the Combat

Training Centers (CTC) (3414H02)

issue:

What are current performance strengths and weaknesses in

the maneuver BOS demonstrated at the CTCs?

Sponsor:

TRADOC (CAC-T)

Start Date:

1st Quarter FY92

End Date:

4th Quarter FY93

Est. Cost:

\$514K

FY92: \$254

FY93: \$260

Description:

A series of analyses of existing data from the NTC, JRTC, and CMTC will be performed to determine major areas of common unit maneuver performance strengths and weaknesses, with an emphasis on weaknesses, for Active

Components and Reserve Components.

Impact:

CAC-T will use this information for development of the

Combined Arms Training Strategy (CATS) for the Active and

Reserve components.

Work Unit:

Lessons Learned by Observer/Controller at CTCs (3414H03)

Issue:

What Doctrine, Training, Organizational, Materiel, and Leadership (DOTML) Lessons Learned can be obtained from the oral histories of experience observer/controllers at

the National Training Center?

Sponsor:

TRADOC (CAC-T)

Start Date:

1st Quarter FY92

End Date:

2nd Quarter FY93

Est. Cost:

\$270K

FY92: \$180K

FY93: \$90K

Description:

A database of O/C oral histories has been collected in routine O/C debriefings at the conclusion of their tour at the National Training Center. This database should provide a rich source of DOTML information from some of the most

experienced trainers in the Army.

impact:

CAC-T will incorporate the results of this study in their Army

Lessons Learned Program.

Work Unit:

Strengths and Weaknesses in Indirect Fire, Air Defense and

Mobility/Countermobility Battlefield Operating Systems (BOS)

Across the CTCs (3414C01)

issue:

What are current major unit performance strengths and weaknesses in these BOSs as demonstrated at the CTCs?

Sponsor:

TRADOC (CAC-T)

Start Date:

2nd Quarter FY92

End Date:

4th Quarter FY93

Est. Cost:

\$739K

FY92: \$404

FY93: \$335K

Description:

A series of analyses of existing data from the NTC, JRTC, and CMTC will be performed to determine major areas of common unit performance strengths and weakness, with an emphasis on weaknesses, for Active Components and

Reserve Components.

Impact:

CAC-T will use this information for development of the

Combined Arms Training Strategy (CATS) for the Active and

Reserve components.

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